Cand. Med. Sci.

TATARINOV, V. G.

Dissertation: "Innervation of the Arteries and Veins of Tongue and the Lower Tooth Artery in Human."

26/6/50
Moscow Medical Stomatological Inst.

SO Vecheryaya Moskva
Sum 71

USSR/Human and Animal Morphology (Normal and Pathological) Nervous System. S

Abs Jour : Ref' Zhur - Biol., No 7, 1958, No 31200

into another (bone, periosteum, pericementum, tooth, etc), which unites theminto a general tooth-jaw system.

Card : 2/2

TATARINOV, V.G.

Paths of venous blood outflow from the mandible. Stomatologiia 40 no.1:69-72 Ja-F '61. (MIRA 14:5)

1. Iz kafedry normal'noy anatomii (zav. - prof. N.V.Kolesnikov) Moskovskogo meditsinskogo stomatologicheskogo instituta (direktor - dotsent G.N.Beletskiy).
(JAWS--BLOOD SUPPLY)

TATARINOV, Vasiliy Georgiyevich; GAL'PERIN, Yu.M., red.; MATVEYEVA, M.M., tekhn. red.

[Textbook of human anatomy and physiology] Uchebnik anatomii i fiziologii cheloveka. 2. izd. peren. Moskva, Medgiz, 1963. 347 p. (MIRA 16:6)
(ANATOMY, HUMAN) (PHYSIOLOGY)

TATARINOV, V.G., dotsent; IL'INA, N.A., dotsent

Spondylous segment and its content. Trudy 1-go MMI 38:11-20 '65.
(MIRA 18:10)

TATARINOV, V.P.; LYSENKOV, N.I.; NOVOSEL'TSEV, N.V., red.; [illegible]ESOVA, I.F., tekhn. red.

[Working felling areas with the preservation of young growth and young stands in the logging camps of Udmurtia] Razrabotka lesosek s sokhraneniem podrosta i molodniaka v lesopromkhozakh Udmurtii. Moskva, TSentr. in-t tekhn. informatsii i ekon. issledovaniia po lesnoi, bumazhnoi i derevoobrabatyvaiushchei promyshl., 1963. 26 p. (MIRA 16:8)

(Udmurt A.S.S.R.--Lumbering)

TATARINOV, Valentin Petrovich; LYSENKOV, Nikolay Il'ich;
YERMOLINSKIY, I.A., red.

[New technology of working cutovers in Udmurtia] Novaia tekhnologiia razrabotki lesosek v Udmurtii. Moskva, Lesnaia promyshlennost', 1964. 62 p. (MIRA 18:3)

TATARINOV, YE.O.

TATARINOV, Ye.O.

Effect of antireticular cytotoxic serum on infectious anemia in splenectomized rats. Medych.zhur. 16:83-90 '47. (MIRA 10:12)

1. Z Institutu eksperimental'noi biologii i patologii Ministerstva okhoroni zdorov'ya URSR (direktor - akad. O.O.Bogomolets' [deceased]).
2. Chlen-korespondent AN URSR.
(SERUM) (ANEMIA) (SPLEEN--SURGERY)

TATARINOV, Ye.O., prof.; GLUZMAN, F.A., kand.med.nauk

Effect of benzene on the hemopoietic system. Medych.zhur. 16:91-94 '47.
(MIRA 10:12)

1. Z kafedri patologichnoi fiziologii (zav. - prof. Ye.O.Tatarinov) Kiivs'kogo ordena Trudovogo Chervonogo Prapora medichnogo institutu im. akad. O.O.Bogomol'tsya. 2. Chlen-korespondent AN URSR (for Tatarinov)

(BLOOD) (BENZENE--PHYSIOLOGICAL EFFECT)

TATARINOV, Ye.O.

Academician A.A.Bogomolets and his influence on the theories of scientists at the Kiev Medical Institute. Medych.zhur. 18 no.1: 35-45 '48. (MIRA 10:12)

1. Chlen-korespondent AN URSR.
(BOGOMOLETS, ALEKSANDR ALEKSANDROVICH, 1881-1946)

TATARINOV, Ye.A.

Role of the vegetative nervous system in imunogenesis. Medych.zhur. 19 no.3:33-48 '49. (MIRA 10:12)

1. Z Institutu klinichnoi fiziologii im. akad. O.O.Bogomol'tsya AN URSR (direktor - chl.-kor. AN URSR P.Ye.Kavets'kiy) I kafedra patologichnoi fiziologii (zaveduvach - chl.-kor. AN URSR Ye.O.Tatarinov) Kiivs'kogo ordena Trudovogo Chervonogo Prapora medichnogo institutu im. akad. O.O.Bogomol'tsya (direktor - dots. T.Ya.Kalinichenko). 2. Chlen-korespondent AN URSR.
(NERVOUS SYSTEM, SYMPATHETIC)

TATARINOV, Ye.A. [Tatarynov, IE.O.]

Permeability of connective tissues. Fiziol. zhur. [Ukr.] 7 no.3:352-361 My-Je '61. (MIRA 14:5)

1. Kafedra patologicheskoy fiziologii Kiyevskogo meditsinskogo instituta im. akademika A.A.Bogomol'tsa.
(CONNECTIVE TISSUES)

TATARINOV, Yu. S.

Letter to the editor of "Fiziologicheskii zhurnal SSSR". Fiziol.zhur. 39 no.3:404 My-Je '53. (MLRA 6:6)

1. Astrakhanskiy Gosudarstvennyy meditsinskiy institut. (Blood pressure) (Bulavintseva, A.I.) (Seleznev, S.A.)

TATARINOV, Yu. S.

TATARINOV, Yu. S. -- "On the Content of Ergonine in the Blood in Anaphylaxis of Dogs." Min Health RSFSR. Ivanovo State Medical Inst. Astrakhan, 1955. (Dissertation for the Degree of Candidate in Medical Sciences)

SO: Knizhnaya Letopis', No 1, 1956

USSR / General Problems of Pathology. Allergy. U

Abs Jour: Ref Zhur-Biol., No 22, 1958, 102422.

Abstract: ether narcosis, the fluctuations of Br at the time of AS are weakly expressed. Preliminary introduction of phenamine led to sharp fluctuation of Br concentration (on the average, an increase in the 1st phase to 6.11 mg%, decreased in the 2nd to 1.1 mg%). If, during the period of sensitization, the animals received NaBr (0.5-3 g), then the AS course ran easier and the mortality decreased from 54 to 16%. The author considers hyperbrominemia, which arises at the time of AS, as a defensive reaction.

Card 2/2

TATARINOV, Yu.S.

Fluctuation in the bromine level of the blood during sensitization, anaphylactic shock, and the post-shock period [with summary in English]. Biul.eksp.biol. i med. 45 no.1:47-51 Ja '58. (MIRA 11:4)

1. Iz kafedry patologicheskoy fiziologii Astrakhanskogo meditsinskogo instituta. Predstavelna deystvitel'nym chlenom AMN SSSR V.N. Chernigovskim.
(ALLERGY, experimental,
blood bromine in (Rus))
(BROMINE, in blood,
in exper. allergy (Rus))

T

Country : USSR
Category : Human and Animal Physiology, Internal Secretion

Abs. Jour. : Ref Zhur Biol., No. 2, 1959, No. 8302

Author : Zakharov, S.V.; Tatarinov, Yu.S.
Institut. : --
Title : The Mechanism of the Action of Insulin. Communication V. The Effect of Insulin on Blood Glucose Levels in the Dog during Electrosleep.
Orig Pub. : Ryul. eksperim. biol. i med., 1958, 45, No. 3, 19--22

Abstract : Glycemia in dogs during electrosleep remained substantially unchanged. When insulin (1--10 units/kg) was injected, hypoglycemia was noted. Electrosleep exerted no effect on the degree of hypoglycemia, but prevented the occurrence of convulsions, in spite of the fact that blood sugar was lowered to 30--40 mg% (in awake animals convulsions occured 2--3 hours after the injection of insulin). Within 1 to 2 hours after electrosleep was terminated (5--6 hours after the injection of insulin) signs of hyperinsulinism developed, i.e., salivation, panting, adynamia; convulsions were occasionally seen.

Card: 1/1

TATARINOV, Yu.S.

Use of paper precipitation in the evaluation of immune reactions of serum proteins in syphilis. Biul.eksp.biol. i med. 47 no.6: 83-84 Je '59. (MIRA 12:8)

1. Iz kafedry biologicheskoy khimii (zav. - prof.S.V.Zakharov) Astrakhanskogo meditsinskogo instituta (dir. - kand.med.nauk I.N.Alamdarov). Predstavlena deystvitel'nym chlenom AMN SSSR N.N.Zhukovym-Verezhnikovym.
(WASSERMANN REACTION,
paper precipitation in evaluation of immune properties of serum proteins (Rus.)

TATARINOV, Yu.S.; TSUKROVA, F.M.

Fractionated properties of serum proteins under acute ionizing radiation with conditions of stimulation and inhibition of the central nervous system. Med. rad. 5 no.9:86-87 S '60. (MIRA 13:12)

(NERVOUS SYSTEM) (BLOOD PROTEINS)
(RADIATION SICKNESS)

TATARINOV, Yu.S.

Immunoelectrophoresis of precipitating sera on paper. Lab.delo 6 no.3:37-39 My-Je '60. (MIRA 13:7)

1. Kafedra biokhmii (zav. - prof. S.V. Zakharov) Astrakhanskogo meditsinskogo instituta im. A.V. Lunacharskogo.
(PAPER ELECTROPHORESIS) (BLOOD PROTEINS)

ZAKHAROV, S.V.; TATARINOV, Yu.S.

Fractional composition of serum proteins in hyperinsulinism. Probl. endok. i gorm. 6 no. 4:96-99 Jl-Ag '60. (MIRA 14:1)
(BLOOD PROTEINS) (INSULIN SHOCK)

TATARINOV, Yu.B.

Electrophoretic investigations of serum producing passive anaphylaxis. Biokhimiia 25 no.2:306-309 Mr-Ap '60. (MIRA 14:5)

1. Kafedra biokhimii Gosudarstvennogo meditsinskogo instituta im. A.V. Lunacharskogo, Astrakhan'.
(BLOOD PROTEINS) (ANAPHYLAXIS)
(ELECTROPHORESIS)

TATARINOV, Yu.S.

Immunological characteristics of serum proteins. Report No.1: Reproduction of anaphylaxis by isolated fractions of blood serum proteins. Biul. eksp. biol. i med. 50 no.10:97-100 O '60. (MIRA 14:5)

1. Iz kafedry biologicheskoy khimii (ispolnyayushchiy obyazannosti zaveduyushchego - dotsent Yu.S.Tatarinov) Astrakhanskogo meditsinskogo instituta imeni A.V.Lunacharskogo (dir. - kandidat meditsinskikh nauk I.N.Alamdarov). Predstavlena deystvitel'nym chlenom AMN SSSR V.V.Parinym.

(ANAPHYLAXIS) (BLOOD PROTEINS)

TATARINOV, YU. S., (USSR)

"Structural Relationships Between Immune γ-Globulins and Protein Antigens."

Report presented at the 5th Int'l. Biochemistry Congress, Moscow, 10-16 Aug 1961.

TATARINOV, Yu.S.

Comparative immunochemical analysis of γ-globulins isolated from normal and hyper-gammaglobulinemic sera. Vop. med. khim. 7 no. 1:49-52 Ja-F '61. (MIRA 14:4)

1. Chair of Biochemistry, the "A.V. Lunacharski" State Medical Institute, Astrakhan.
(GAMMA GLOBULIN) (SERUM)

TATARINOV, Yu.S.

Immunological characteristics of serum proteins. Report No.2: Determination of the amount of protein fractions immunologically related to albumins in globulins. Biul. eksp. biol. i med. 52 no.7:81-83 Jl '61. (MIRA 15:3)

1. Iz kafedry biologicheskoy khimii (ispolnyayushchiy obyazannosti zaveduyushchego - dotsent Yu.S. Tatarinov) Astrakhanskogo meditsinskogo instituta. Predstavlena deystvitel'nym chlenom AMN SSSR N.N. Zhukovym-Verezhnikovym.
(BLOOD PROTEINS)

TATARINOV, Yu.S.; CHIRKIN, Yu.D.

Fractional composition of serum proteins in guinea pigs infected with Cl. perfringens and treated with ekmonovocillin-1 or tetracycline. Antibiotiki 7 no.4:335-339 Ap '62. (MIRA 15:3)

1. Kafedra biokhimii (zav. - dotsent Yu.S. Tatarinov), kafedra mikrobiologii (zav. - prof. B.I. Kurochkin) Astrakhanskogo meditsinskogo instituta imeni A.V. Lunacharskogo.

(BLOOD PROTEINS) (TETRACYCLINE)
(CLOSTRIDIUM PERFRINGENS) (ANTIBIOTICS)

TATARINOV, Yu.S.

Some controversial questions in the monograph of V.I. Sachkov, "Immunological methods for the study of rheumatism and other collagen diseases." Vop. med. khim. 8 no.6:646-650 N-D '62. (MIRA 17:5)

1. Kafedra biokhimii Astrakhanskogo meditsinskogo instituta imeni A.V. Lunacharskogo.

AFANAS'YEVA, A. V.; TATARINOV, Yu. S.

Electrophoretic analysis of Wasserman reagins. Vest. derm. i ven. 36 no.6:33-36 Je '62. (MIRA 15:6)

1. Iz kafedry biokhimii (i. o. zav. - dotsent Yu. S. Tatarinov) Astrakhanskogo meditsinskogo instituta.

(SYPHILIS--DIAGNOSIS--WASSERMANN REACTION)
(ELECTROPHORESIS)

TATARINOV, Yu.S.

Immunological characteristics of serum proteins. Report No. 3: The species-specificity of immune gamma globulins of the first and second order. Biul.eksp.biol.i med. 54 no.7:59-62 Jl '62. (MIRA 15:11)

1. Iz kafedry biologicheskoy khimii (zav. - dotsent Yu.S. Tatarinov) Astrakhanskogo meditsinskogo instituta (rektor - dotsent I.N.Alamdarov). Predstavlena deystvitel'nym chlenom AMN SSSR N.N.Zhukovym-Verezhnikovym.

(GAMMA GLOBULIN)

TATARINOV, Yu.S.

Immunochemical analysis of the supernatant fluid after formation of the precipitate in the complex antigen-antibody system. Vop. med. Khim. 9 no. 3:244-250 My-Je '63. (MIRA 17:9)

1. Kafedra biokhimii Astrakhanskogo meditsinskogo instituta.

TATARINOV, Yu.S.; AFANAS'YEVA, A.V.; PARFENOVA, L.F.

Development of serum proteins in human ontogenesis. Vop. med. khim. 9 no.4:403-410 Jl-Ag '63 (MIRA 17:4)

1. Kafedra biokhimii i kafedra akusherstva i ginekologii Astrakhanskogo meditsinskogo instituta.

TATARINOV, Yu.S.; NOGALLER, A.M.

Immunological characteristics of serum proteins in acute and chronic chlecystitis. Terap. arkh. 35 no.1:37-43 Ja'63. (MIRA 16:9)

1. Kafedry biokhimii (zav. - dotsent Yu.S. Tatarinov) i kliniki propedevtiki vnutrennikh bolezney (zav. - prof. A.M. Nogaller) Astrakhanskogo meditsinskogo instituta imeni A.V. Lunacharskogo.

TATARINOV, Yu.S.

Specificty of antigen components of globulin forming following a spontaneous disintegration of the molecule. Biul. eksp. biol. i med. 57 no. 2:84-87 F '64. (MIRA 17:9)

1. Kafedra biologicheskoy i organicheskoy khimii (zav. - dotsent Yu. S.Tatarinov) Astrakhanskogo meditsinskogo instituta. Predstavlena deystvitel'nym chlenom AMN SSSR N.N.Zhukovym-Verezhnikobym.

TATARINOV, Yu.S.

Detection of embryo-specific α-globulin in the blood serum of a patient with primary liver cancer. Vop. med. khim. 10 no.1: 90-91 Ja-F '64. (MIRA 17:12)

1. Kafedra biokhimii Astrakhanskogo meditsinskogo instituta imeni A.V. Lunacharskogo.

TATARINOV, Yu.S.

Detection of embryo-specific beta-globulin in the blood serum in hepatic cell cancer and the active stage of liver cirrhosis. Vop.med.khim. 10 no.2:218-219 Mr-Ap '64. (MIRA 18:1)

Immunochemical characteristics of serum paraprotein in a case of beta-myeloma. Ibid.:190-192

1. Kafedra biokhimii Astrakhanskogo moditsinskogo instituta.

TATARINOV, Yu.S.; AFANAS'YEVA, A.V.

Detection of similar antigenic determinants in embryospecific α-globulins in man and some animals. Biul. eksp. biol. i med. 59 no.6:65-69 Je '65. (MIRA 18:6)

1. Kafedra biokhimii (zav. - dotsent Yu.S. Tatarinov) Astrakhanskogo meditsinskogo instituta.

TATARINOV, Yu.S.

Content of embryospecific β_1-globulin in the serum of fetuses, newborn infants and adult persons in primary cancer of the liver. Vop. med. khim. 11 no.2:20-24 Mr-Ap '65. (MIRA 18:10)

1. Kafedra biokhimii Astrakhanskogo meditsinskogo instituta.

TATARINOV, Yu.S.

Current data on embryospecific antigenic components in human blood serum. Vop. med. khim. 10 no.6:584-589 N-D '64.
(MIRA 19:1)

1. Kafedra biokhimii Astrakhanskogo meditsinskogo instituta.

TSEFT, A.L.; TATARINOVA, A.A.

Methods for selective extraction of iron, copper, and sulfur from the copper concentrates of central Kazakhstan. Vest. AN Kazakh. SSR 14 no.8:32-42 Ag '58. (MIRA 11:10)
(Karaganda Province--Copper ores) (Hydrometallurgy)

TATARINOVA, A.M.

Competition for the title of brigades of communist labor in the North Kazakhstan geological administration. Razved. i okh. nedr 26 no. 1:58-59 Ja '60. (MIRA 13:12)

1. Severo-Kazakhstanskiy gruppkom profsyuza rabochikh geologorazvedochnykh rabot.
(North Kazakhstan Province--Prospecting)

KOSTYLEVA, L.A.; TATARINOVA, G.A.

Determination of the silicon content of grey pig irons by the method of thermoelectromotive force. Zav. lab. 30 no.9:1074 '64. (MIRA 18:3)

1. Onezhskiy traktornyy zavod.

IMDASYNOV, Iskander Nurtasovich; TATARINOVA, K.N., otv. red.; TSYBULEVSKIY, B.L., red.; ROMANOVA, N.I., tekhn. red.

[Labor movement and the labor party of Great Britain during the world economic depression] Rabochee dvizhenie i leiboristskaia partiia Velikobritanii v period mirovogo ekonomicheskogo krizisa. Otv. red. K.N.Tatarinova. Moskva, Izd-vo In-ta mezhdunarodnykh otnoshenii, 1961. 233 p. (MIRA 14:11)

(Great Britain—Labor party)
(Great Britain—Economic conditions)

S/020/60/132/06/67/068
B011/B003

AUTHORS: Belikova, N. P., Tatarinova, L. G.

TITLE: Spontaneous Infection of Haemaphysalis japonica douglasi N. With the Virus of Ixodic Encephalitis in Primorskiy kray

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 6, pp. 1462 - 1464

TEXT: It may be seen from publications that the part played by some Ixodidae ticks with respect to focuses of ixodic encephalitis in Haemaphysalis japonica douglasi has not been clarified as yet. It was not possible to isolate a virus from nymphae of this kind from a focus (N. V. Ryzhov and A. V. Kozlova, Ref. 3). For this reason the authors examined this tick with regard to virus, occurrence, and occurrence period. They used pubescent ticks which were collected in a wood of Swiss pines and deciduous trees in Tudo-Vakskoye, Kalininskiy rayon on May 20, 1958. Mice were infected with a 10% suspension prepared from 50 ticks. One mouse was taken ill on the sixth day. Other mice were taken ill after an infection with its brain. A death-rate of 100% was

Card 1/3

Spontaneous Infection of Haemaphysalis japonica douglasi N. With the Virus of Ixodic Encephalitis in Primorskiy kray

S/020/60/132/06/67/068
B011/B003

noted after the fifth experimental repetition. Fig. 1 provides a scheme of the virus isolation. The clinical picture showing convulsions, pareses, and paralyses was characteristic of encephalitis. In the first place, inflammations of the brain matter and meninges were caused in the central nervous system. This was indicative of a meningoencephalitis. The period of incubation was more and more shortened by further repetition of the experiments (from 16 to 5-6 days). The mice perished 24 hours after their illness. The authors proved the antigenic affinity of the strain No. 949 with the virus of ixodic encephalitis. The authors give a percentage of the individual Ixodidae ticks in woods of Swiss pines and deciduous trees of Primorskiy kray. Hence it proceeds that in addition to the main carrier of encephalitis (Ixodes persulcatus) H.japonica douglasi has a considerable share in the ticks' fauna of the plant associations mentioned. The greatest activity is developed by grown-up H.japonica douglasi during April and May, whereas Ix.persulcatus attain a maximum in May - June. The authors did not observe an attack of man by Haemaphysalis concinna in April (Fig. 2). There are 2 figures and 3 Soviet references.

Card 2/3

Spontaneous Infection of Haemaphysalis japonica douglasi N. With the Virus of Ixodic Encephalitis in Primorskiy kray

S/020/60/132/06/67/068
B011/B003

ASSOCIATION: Vladivostokskiy nauchno-issledovatel'skiy institut epidemiologii, mikrobiologii i gigieny (Vladivostok Scientific Research Institute of Epidemiology, Microbiology, and Hygiene)

PRESENTED: February 12, 1960, by Ye. N. Pavlovskiy, Academician

SUBMITTED: February 3, 1960

Card 3/3

TATARINOVA, L.G.

Experimental data on the role of the tick Haemaphysalis japonica douglasi N. in the transmission of the virus of tick-borne encephalitis. Dokl. AN SSSR 140 no.2:510-512 S '61. (MIRA 14:9)

1. Vladivostokskiy nauchno-issledovatel'skiy institut epidemiologii, mikrobiologii i gigyeny. Predstavleno akademikom Ye.N.Pavlovskim.
(TICKS AS CARRIERS OF DISEASE) (ENCEPHALITIS)

TATARINOVA, L.G.; BELIKOVA, N.P.

Transmission of the virus of tick-borne encephalitis by Haemaphysalis neumanni D. Dokl. AN SSSR 140 no.3:734-735 S '61. (MIRA 14:9)

1. Vladivostokskiy nauchno-issledovatel'skiy institut epidemiologii, mikrobiologii i gigiyeny.
(MARITIME TERRITORY--ENCEPHALITIS) (TICKS AS CARRIERS OF DISEASE)

TATARINOVA, L.G.

Isolation of a tick-borne encephalitis virus from Oriochichla dauma. Vop. virus 7 no.1:110 Ja-F '62. (MIRA 15:3)

1. Vladivostokskiy nauchno-issledovatel'skiy institut epidemiologii, mikrobiologii i gigiyeny, Vladivostok.
(ENCEPHALITIS)
(TICKS AS CARRIERS OF DISEASE)
(THRUSHES)

TATARINOVA, L.G.

Isolation of tick-borne encephalitis virus from golden thrush. (MIRA 18:3)
Trudy VladIEMG no.2:8-9 '62.

1. Iz Vladivostokskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny.

TATARINOVA, L.G.

Characteristics of local strains of the tick-borne encephalitis virus in experiments on chicks. Trudy VladIEMG no.2:9-11 '62.

Comparative characteristics of tick-borne encephalitis virus strains isolated in various foci of the Maritime Territory. Ibid.:11-17 (MIRA 18:3)

1. Iz Vladivostokskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny.

TATARINOVA, L.G.; SVIDOVSKAYA, R.P.

Clinical aspects of tick-borne encephalitis in the Maritime Territory. Trudy VladIEMG no.2:17-21 '62. (MIRA 18:3)

1. Iz Vladivostokskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny i kliniki nervnykh bolezney Vladivostokskogo meditsinskogo instituta.

OBRATNOVA, Ye.A.; TATARINOVA, L.G.

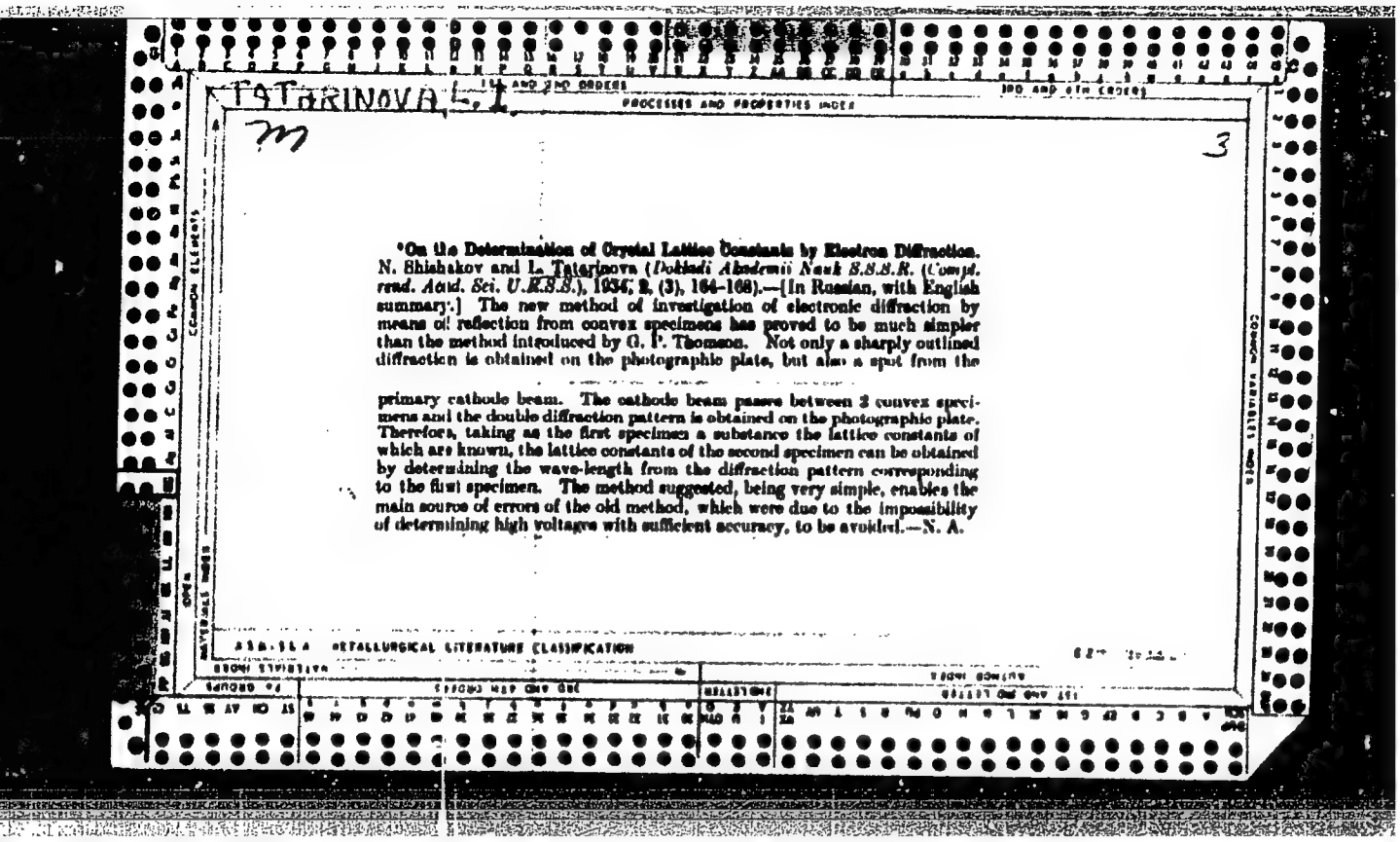
Some data on seroprevention of tick-borne encephalitis in Chuguyevka District of the Maritime Territory. Trudy VladIPMG no.2:22-24 '62. (MIRA 18:3)

1. Iz Primorskoy krayevoy protivochumnoy stantsii i Vladivostokskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny.

SLONOV, M.N., zooparazitolog; Prinimali uchastiye: BELIKOVA, N.P., parazitolog po iksodovym kleshcham; TATARINOVA, L.G., virusolog; KARABANOVA, E.M., laborant; SOTNIKOVA, T.I., laborant

Zooparasitic characteristics of a natural focus of tick-borne encephalitis in the central part of the Maritime Territory. Trudy VladIEMG no.2:27-32 '62. (MIRA 18:3)

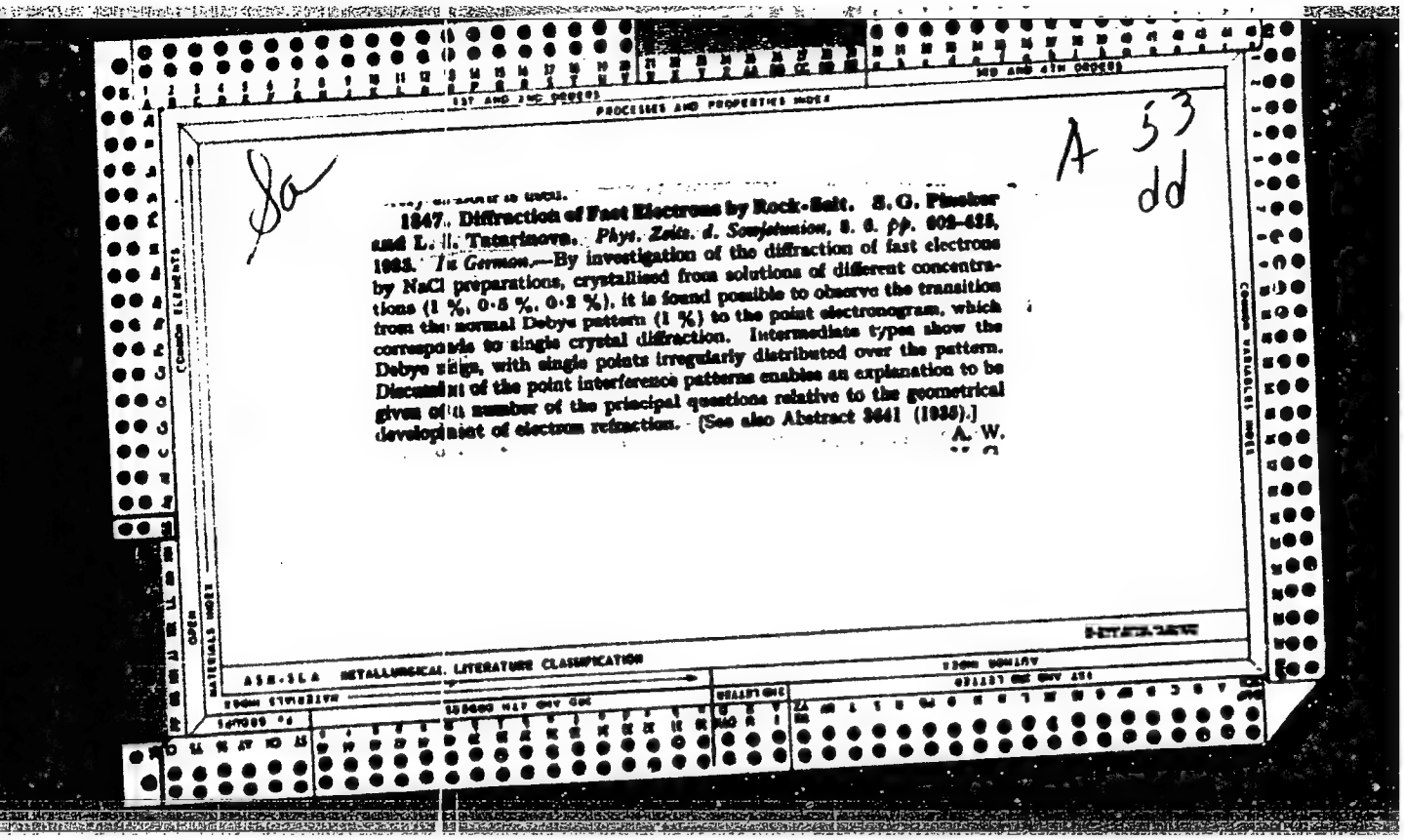
1. Iz Vladivostokskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny.



TATARINOVA, L. I.

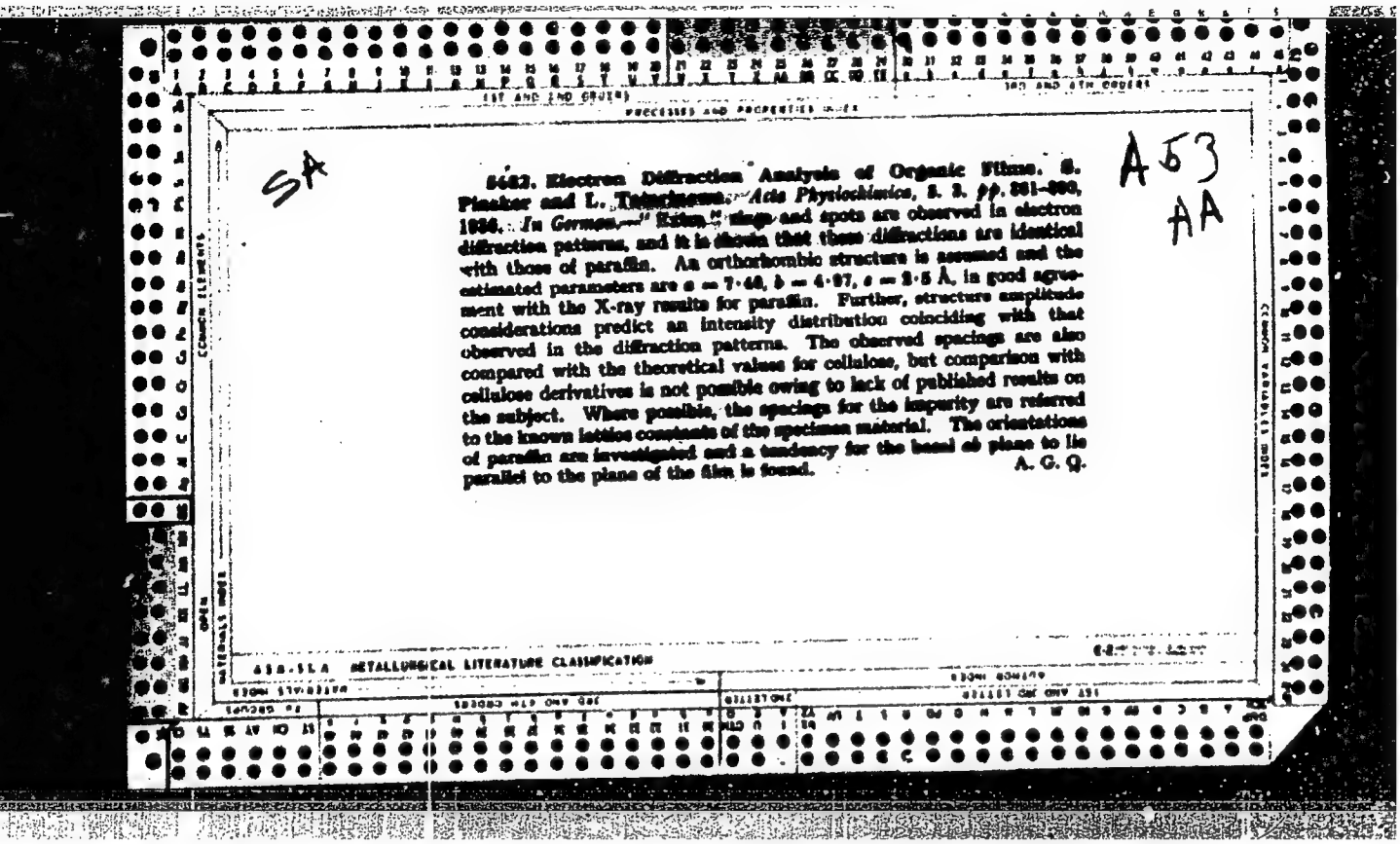
3

On the Determination of Crystal Lattice Constants by Electron Diffraction. N. Shishakov and L. Tatarinova (*Doklady Akademii Nauk S.S.S.R. (Comptes rend. Acad. Sci. U.R.S.S.)*, 1934, 2, (3), 164–168).—[In Russian, with English summary.] The new method of investigation of electronic diffraction by means of reflection from convex specimens has proved to be much simpler than the method introduced by G. P. Thomson. Not only a sharply outlined diffraction is obtained on the photographic plate, but also a spot from the primary cathode beam. The cathode beam passes between 2 convex specimens and the double diffraction pattern is obtained on the photographic plate. Therefore, taking as the first specimen a substance the lattice constants of which are known, the lattice constants of the second specimen can be obtained by determining the wave-length from the diffraction pattern corresponding to the first specimen. The method suggested, being very simple, enables the main source of errors of the old method, which were due to the impossibility of determining high voltages with sufficient accuracy, to be avoided.—N. A.



1847. **Diffraction of Fast Electrons by Rock-Salt.** S. G. Pinsker and L. I. Tatarinova. *Phys. Zeits. d. Sowjetunion*, 8. 6. pp. 603–625, 1935. *In German.*—By investigation of the diffraction of fast electrons by NaCl preparations, crystallised from solutions of different concentrations (1 %, 0·5 %, 0·2 %), it is found possible to observe the transition from the normal Debye pattern (1 %) to the point electronogram, which corresponds to single crystal diffraction. Intermediate types show the Debye rings, with single points irregularly distributed over the pattern. Discussion of the point interference patterns enables an explanation to be given of the number of the principal questions relative to the geometrical development of electron refraction. [See also Abstract 3641 (1936).]

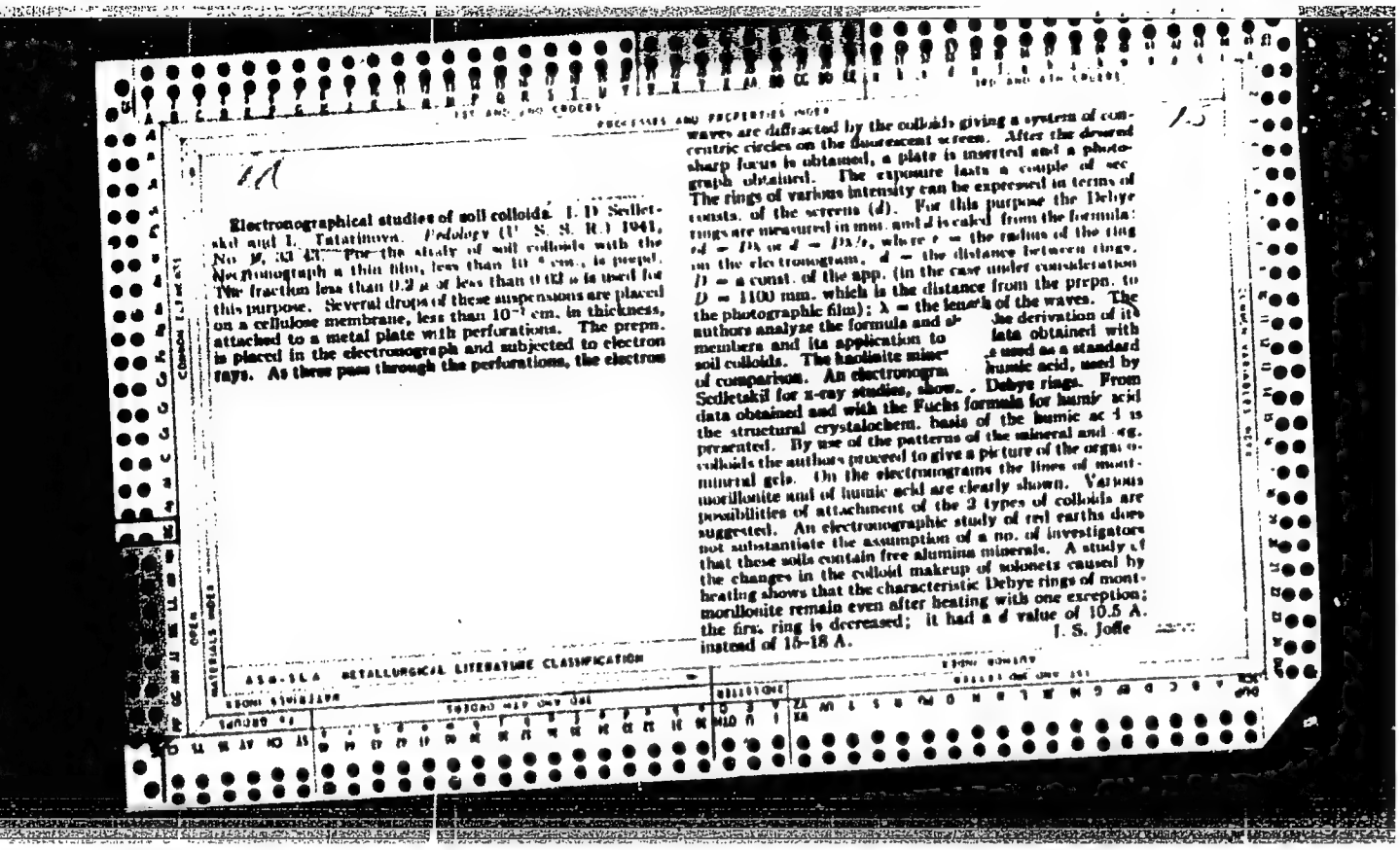
A. W.



SA

A53
AA

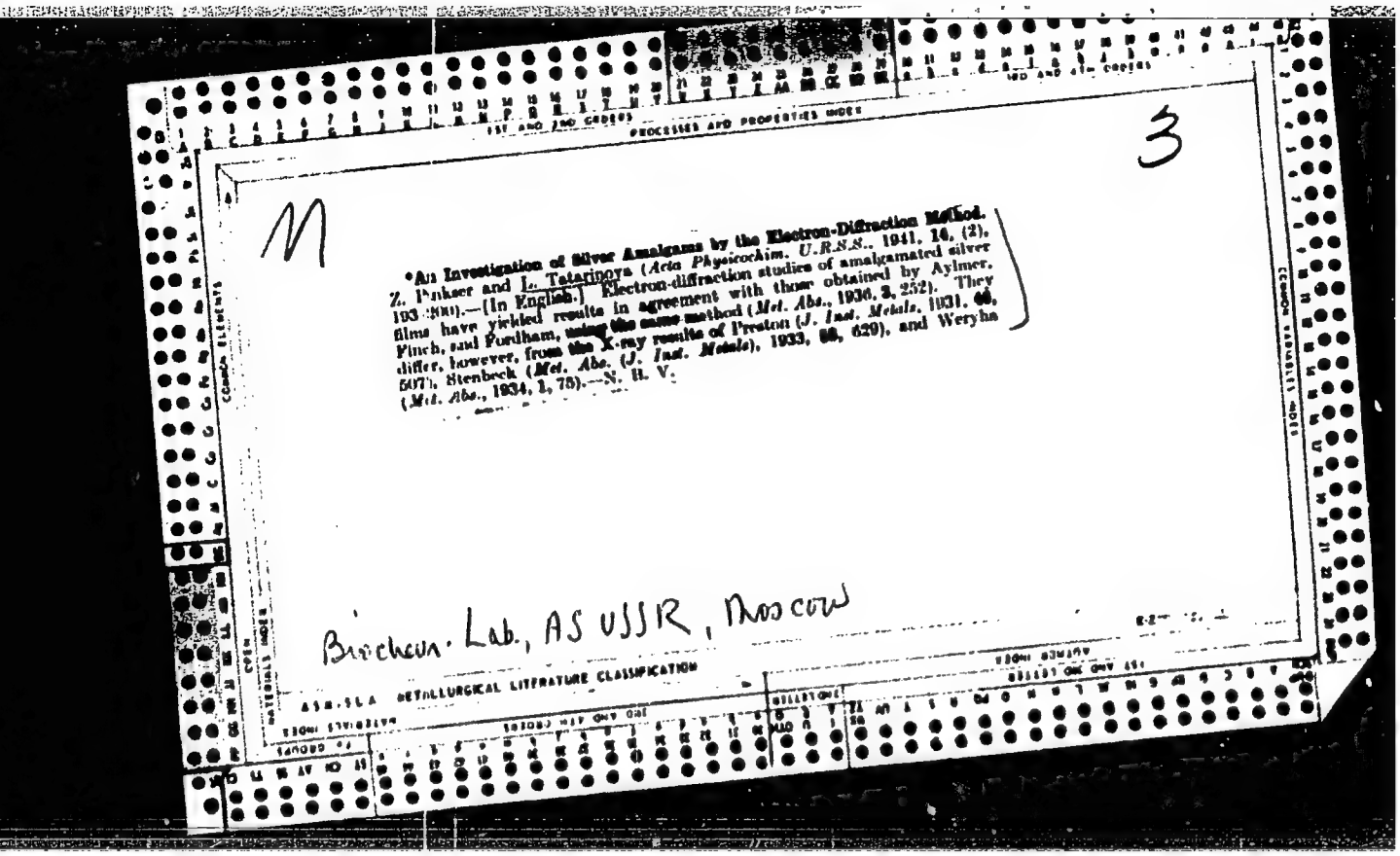
8482. **Electron Diffraction Analysis of Organic Films. S. Pinsker and L. Tatarinova.** *Acta Physicochimica*, S. S. pp. 881–890, 1936. *In German.*—" Extra " rings and spots are observed in electron diffraction patterns, and it is shown that these diffractions are identical with those of paraffin. An orthorhombic structure is assumed and the estimated parameters are $a = 7{\cdot}46$, $b = 4{\cdot}97$, $c = 2{\cdot}5$ Å, in good agreement with the X-ray results for paraffin. Further, structure amplitude considerations predict an intensity distribution coinciding with that observed in the diffraction patterns. The observed spacings are also compared with the theoretical values for cellulose, but comparison with cellulose derivatives is not possible owing to lack of published results on the subject. Where possible, the spacings for the impurity are referred to the known lattice constants of the specimen material. The orientations of paraffin are investigated and a tendency for the basal *ab* plane to lie parallel to the plane of the film is found. A. G. G.



11

Electronographical studies of soil colloids. I. D Sedletskĭ and L. Tatarinova. *Pedology* (U. S. S. R.) 1941, No. 9, 33-42. Pre the study of soil colloids with the electronograph a thin film, less than 10^{-5} cm., is prepd. The fraction less than 0.2 μ or less than 0.02 μ is used for this purpose. Several drops of these suspensions are placed on a cellulose membrane, less than 10^{-5} cm. in thickness, attached to a metal plate with perforations. The prepn. is placed in the electronograph and subjected to electron rays. As these pass through the perforations, the electron waves are diffracted by the colloids giving a system of concentric circles on the fluorescent screen. After the desired sharp focus is obtained, a plate is inserted and a photograph obtained. The exposure lasts a couple of sec. The rings of various intensity can be expressed in terms of consts. of the screens (d). For this purpose the Debye rings are measured in mm. and d is calcd from the formula: $rd = D\lambda$ or $d = D\lambda/r$, where r = the radius of the ring on the electronogram, d = the distance between rings, D = a const. of the app. (in the case under consideration D = 1100 mm. which is the distance from the prepn. to the photographic film); λ = the length of the waves. The authors analyze the formula and the derivation of it's members and its application to data obtained with soil colloids. The kaolinite mine[illegible] used as a standard of comparison. An electronogra[illegible] humic acid, used by Sedletskĭ for x-ray studies, show[illegible] Debye rings. From the structural crystalochem. basis of the humic acid is presented. By use of the patterns of the mineral and org. colloids the authors proceed to give a picture of the organo-mineral gels. On the electronograms the lines of montmorillonite and of humic acid are clearly shown. Various possibilities of attachment of the 2 types of colloids are suggested. An electronographic study of rel earths does not substantiate the assumption of a no. of investigators that these soils contain free alumina minerals. A study of the changes in the colloid makup of solonets caused by heating shows that the characteristic Debye rings of montmorillonite remain even after heating with one exception; the first ring is decreased; it had a d value of 10.5 A. instead of 15-18 A.

J. S. Joffe



3

M

•An Investigation of Silver Amalgams by the Electron-Diffraction Method. Z. Pinsker and L. Tatarinova (*Acta Physicochim. U.R.S.S.*, 1941, 14, (2), 193 :(In English.) Electron-diffraction studies of amalgamated silver films have yielded results in agreement with those obtained by Aylmer, Finch, and Purdham, using the same method (*Met. Abs.*, 1936, 3, 252). They differ, however, from the X-ray results of Preston (*J. Inst. Metals*), 1933, 52, 629), and Weryha (*Met. Abs.*, 1934, 1, 75).—N. H. V.

Biochem. Lab., AS USSR, Moscow

METALLURGICAL LITERATURE CLASSIFICATION

TATARINOVA, L.

Mbr., Biochemical Lab., Dept. Biol. Sci., Acad. Sci., -1941-. "Electronographic Investigation of Cadmium-Chloride," Acta Phys. 14, No. 5 1941.

TATARINOVA, L.G.; BELIKOVA, N.P.; KARNAUKHOVA, N.G.

In scientific institutions of Vladivostok. Vop.virus. 4 no.4:511 Jl-Ag '59. (MIRA 12:12)
(MARITIME TERRITORY--TICKS AS CARRIERS OF DISEASES)
(ENCEPHALITIS)

TATARINOVA, L. G.

"On the etiology of the tick-borne encephalitis on the Primorye region."
Page 90

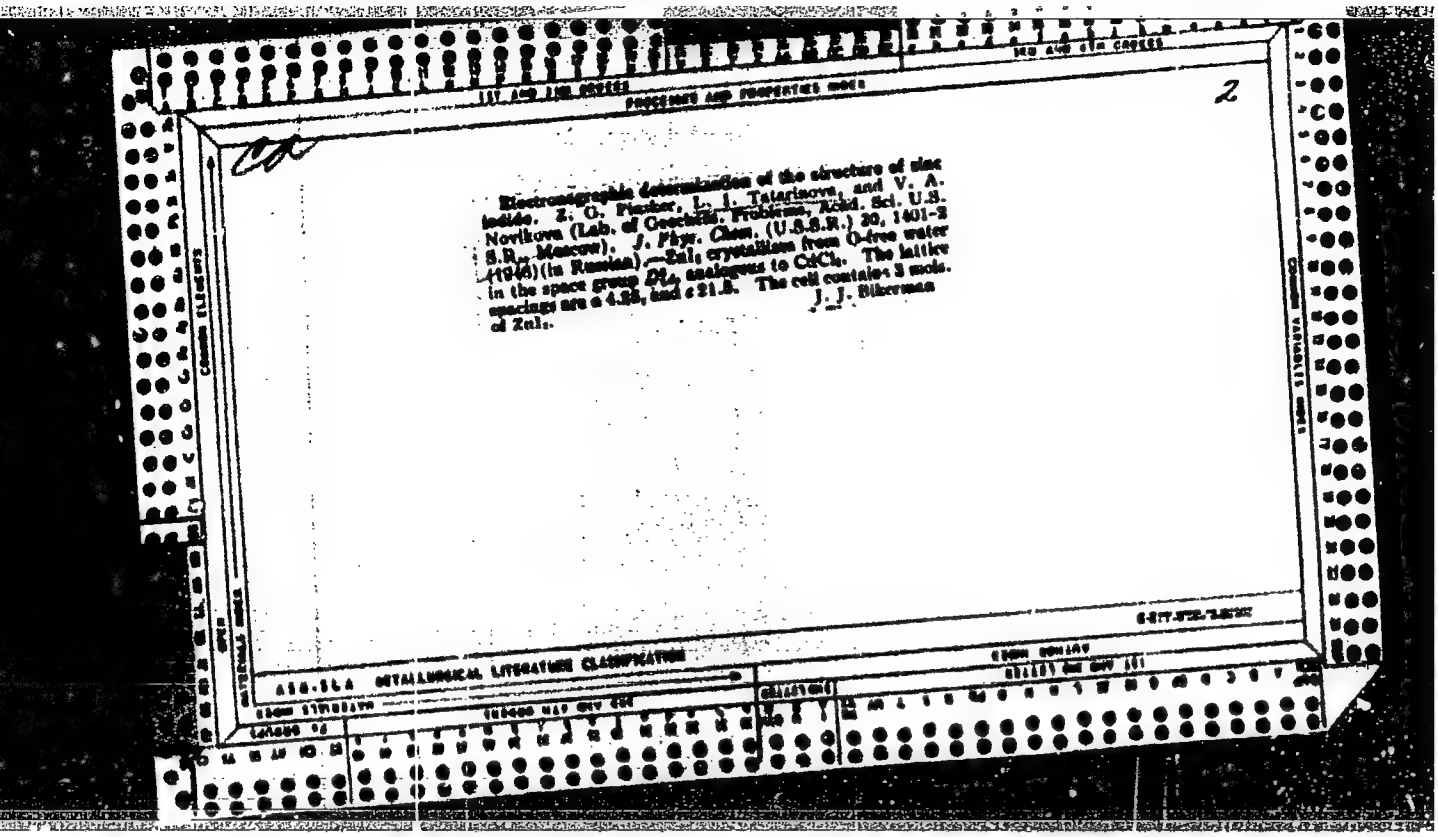
Desyatoye soveshchaniye po parazitologicheskim problemem i prirodnoochagovym boleznyam. 22-29 Oktyabrya 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 254pp.

Electron Diffraction by Silver Amalgams. Z. G. Pinsker and L. I. Tatarinova (*Zhur. Fizich. Khimii* (*J. Phys. Chem.*), 1941, **15**, 96–100); *Brit. Chem. Abs.*, **1943**, (A I), 8).—[In Russian.] Evaporated silver films kept in mercury vapour show transmission patterns of a cubic lattice (17·94 A.) and at a higher mercury concentration, two tetragonal face-centred lattices (*a* 6·93 and 9·05, *c* 5·82 and 5·62 A.). *Cf. Met. Abs.*, 1941, **8**, 333.

TATARINOVA, L. I.

Solubility of kaolin in water. Z. G. PINSKER, L. I. TATARINOVA, AND V. A. NOVIKOVA. *Compt. rend. acad. sci. U.R.S.S.*, 33 [3] 231–32 (1941); *Chem. Abstracts*, 37, 6176 (1943).—Drops of the supernatant liquid from an aqueous suspension of finely pulverized nacrite were placed on thin celluloid films and evaporated at 40° to 50°C. The residue consisted of oriented polycrystals containing small laminated crystals of nacrite arranged with their basal plane parallel to the film but random along the azimuth. This result was further confirmed by examination with X rays. The same results were obtained on solutions obtained by ultrafiltration. It is therefore established that kaolin forms true solutions in water.

Electronographic investigation of the structure of lead iodide. Z. Pinsker, L. Tatarinova, and V. Novikova (Acta Physicochim. U.R.S.S., 1943, 18, 378-386). - The investigation has established the existence of two modifications. PbI_2 obtained by crystallisation from aq. solutions belongs to the space-group D_{3d}^3 with one mol. per unit cell, and cell dimensions a 4·54, c 6·90 Å. PbI_2 obtained by sublimation belongs to the space-group D_{3d}^5 with 3 mols. per unit cell and a 4·54, c 20·7 Å. At. parameters are given.



Electrosmographic determination of the structure of zinc iodide. Z. G. Pinsker, L. I. Tatarinova, and V. A. Novikova (Lab. of Crystals, Problems, Acad. Sci. U.S.S.R., Moscow). *J. Phys. Chem.* (U.S.S.R.) 20, 1401-2 (1946) (In Russian).—ZnI$_2$ crystallizes from O-free water in the space group D_{4h}^{17}, analogous to CdCl$_2$. The lattice spacings are a 4.28, and c 21.8. The cell contains 3 mols. of ZnI$_2$.

J. J. Bikerman

TATARINOVA, L. I.

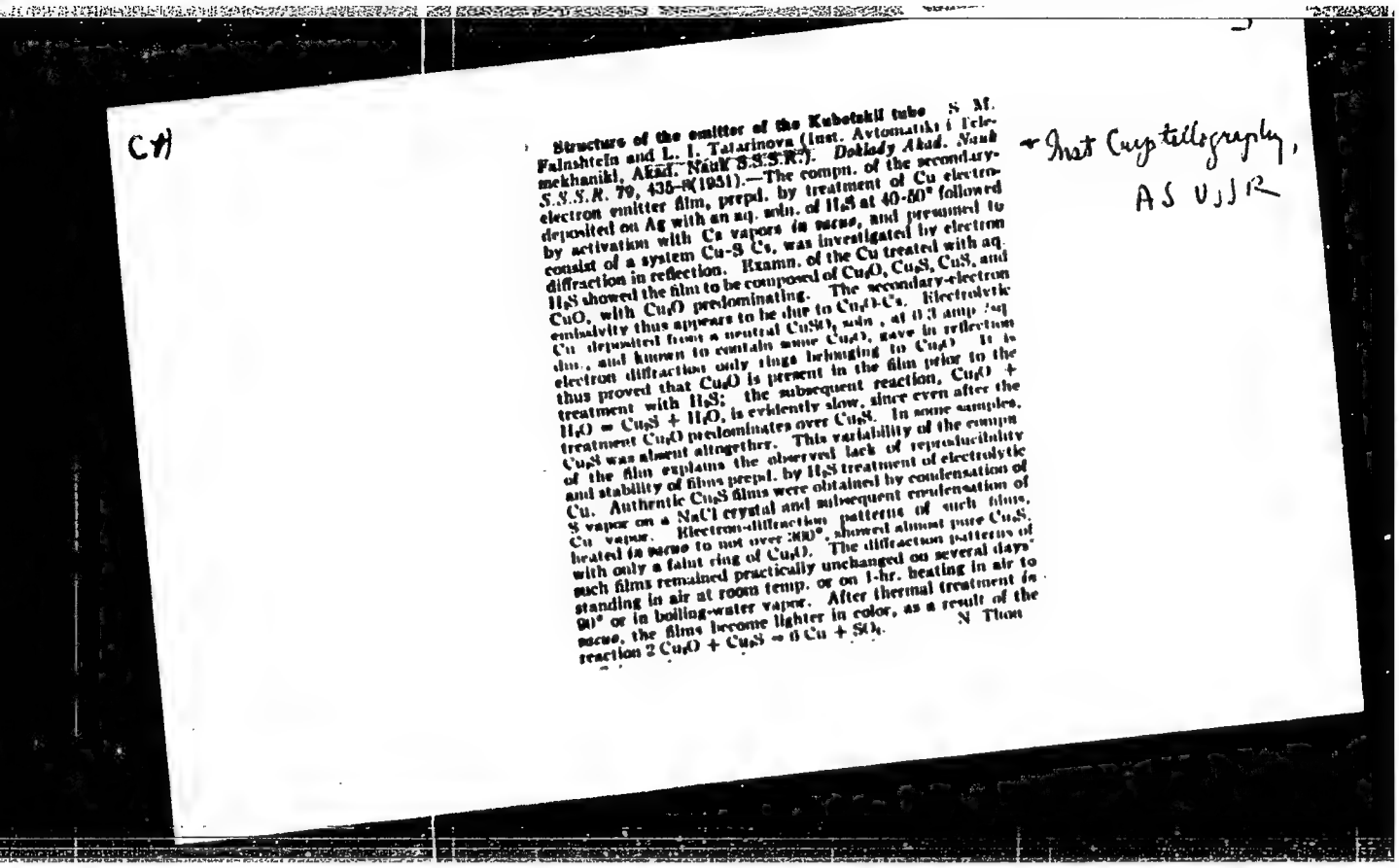
Z. G. Pinsker, E. L. Lapidus, and L. I. Tatarinova, "The electronographic investigation of the structure of kaolinite. P. 1017.

A theory has been worked out for the formation and the calculation of electronograms from monocrystallic and oriented polycrystallic samples for the monoclinic lattice. A point electronogram has been obtained from the nacrite monocrystal which makes it possible to determine the dimensions of the unit lattice of kaolin minerals in the base plane (ab) and to determine the translation group for them (C_m^b).

Institute of Geochemistry and Analytical Chemistry of the Acad. of Sciences U.S.S.R.

Institute of Crystallography, Moscow
December 31, 1947

SO: Journal of Physical Chemistry (USSR) 22, No. 9, 1948



C-H

Structure of the emitter of the Kubetskii tube. S. M. Fainshtein and L. I. Tatarinova (Inst. Avtomatiki i Telemekhaniki, Akad. Nauk S.S.S.R.). *Doklady Akad. Nauk S.S.S.R.* 79, 435–8(1951).—The compn. of the secondary-electron emitter film, prepd. by treatment of Cu electrodeposited on Ag with an aq. soln. of H_2S at 40–50° followed by activation with Cs vapors in vacuo, and presumed to consist of a system Cu-S-Cs, was investigated by electron diffraction in reflection. Examn. of the Cu treated with aq. H_2S showed the film to be composed of Cu_2O, Cu_2S, CuS, and CuO, with Cu_2O predominating. The secondary-electron emissivity thus appears to be due to Cu_2O-Cs. Electrolytic Cu deposited from a neutral $CuSO_4$ soln., at 0.3 amp./sq. dm., and known to contain some Cu_2O, gave in reflection electron diffraction only rings belonging to Cu_2O. It is thus proved that Cu_2O is present in the film prior to the treatment with H_2S; the subsequent reaction, $Cu_2O + H_2O = Cu_2S + H_2O_2$, is evidently slow, since even after the treatment Cu_2O predominates over Cu_2S. In some samples Cu_2S was absent altogether. This variability of the compn. of the film explains the observed lack of reproducibility and stability of films prepd. by H_2S treatment of electrolytic Cu. Authentic Cu_2S films were obtained by condensation of S vapor on a NaCl crystal and subsequent condensation of Cu vapor. Electron-diffraction patterns of such films, heated in vacuo to not over 300°, showed almost pure Cu_2S, with only a faint ring of Cu_2O. The diffraction patterns of such films remained practically unchanged on several days' standing in air at room temp. or on 1-hr. heating in air to 90° or in boiling-water vapor. After thermal treatment in vacuo, the films become lighter in color, as a result of the reaction $2Cu_2O + Cu_2S = 6Cu + SO_2$. N. Thon

→ Inst Crystallography, AS USSR

TATARINOVA, L. I.
Solid State Physics

Dissertation: "An Electronographic Investigation of Crystalline and Amorphous Antimony." Cand Phys-Math Sci, Inst of Crystallography, Acad Sci USSR, Moscow, 1953. (Referativnyy Zhurnal -- Fizika Moscow, Mar 54)

SO: SUM 213, 20 Sep 1954

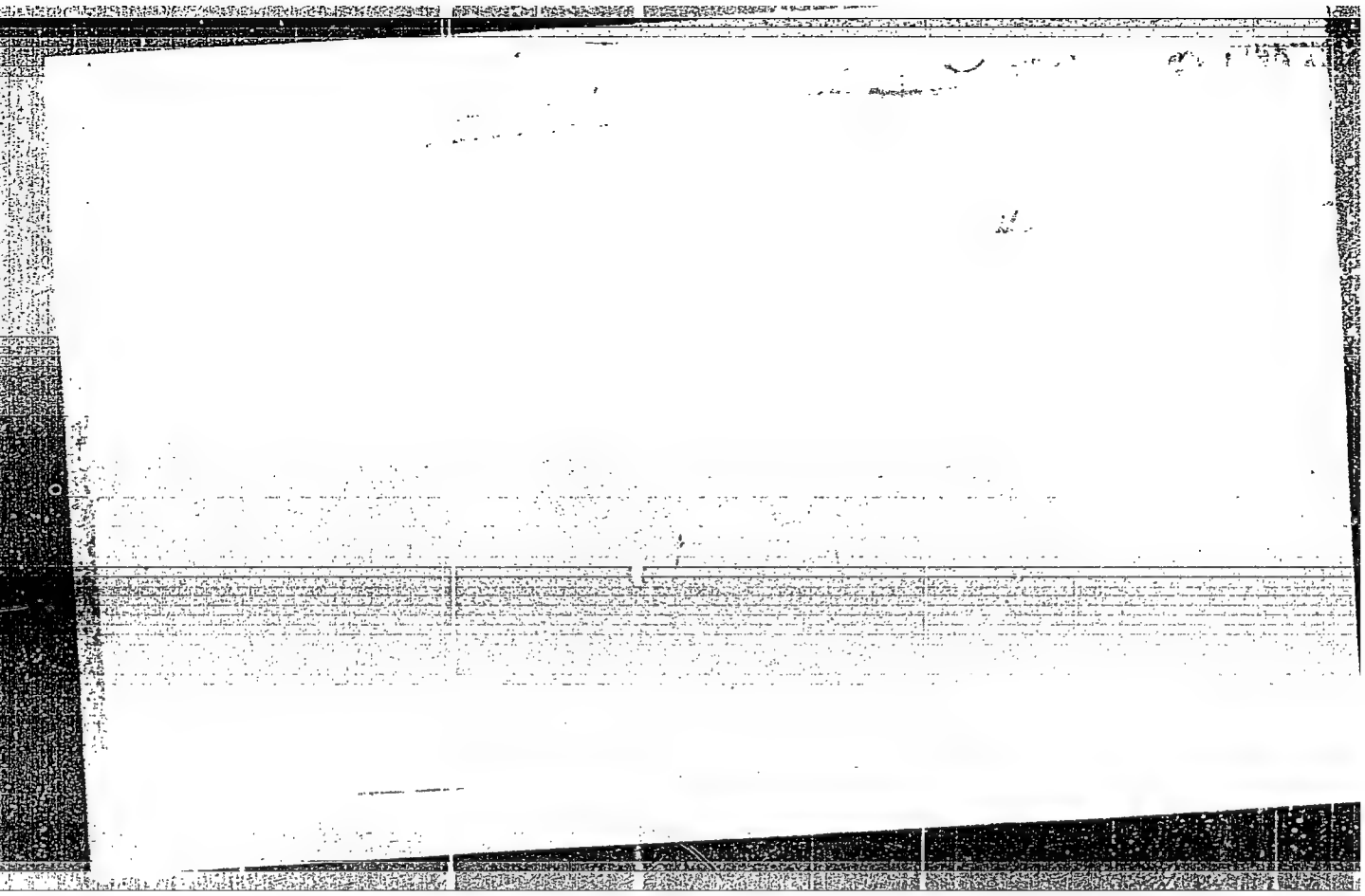
TATARINOVA, L. I.

Electronographic investigation of amorphous antimony with the aid of Fourier analysis of the intensity curve. L. I. Tatarinova and Z. G. Pinsker. *Doklady Akad. Nauk S.S.S.R.* 95, 265–8(1954); cf. Hendus, *C.A.* 37, 6514⁹. — The electron-diffraction diagrams of amorphous Sb show 8 distinct interference maxima. The visual inspection of the diffraction phenomenon on the fluorescent screen gives evidence for a continuous sublimation of Sb during the expt., and the gradual intensification of the interference circles indicates progressive crystn. The position of the original interferences of the amorphous phase is different from that of the cryst. end product. The intensity was measured by the visual Hartmann photometer. From the corresponding intensities the radial electron ds. and at. distance distribution as $f(\sin\theta/\lambda)$ were derived, with use of the F values known from x-ray diffraction of Sb. The interference maxima are rather sharp, and much better than the x-ray curves discussed by Hendus. The coördination no. of the first group is in cryst. Sb = 3; in amorphous Sb = 4. Discrepancies were found in the second coördination sphere, but in the third sphere 9 neighboring atoms were found, whereas Hendus gave 12, as in cryst. Sb, which shows 12 neighbors with distances of 4.20 and 4.40 A. The max. for 4.05 A. corresponds to 3 Sb atoms, while in the cryst. state there are 4 atoms below the max. 5.15 and 5.23 A. In the fifth sphere there are 28 atoms (Hendus gave 30); the 6th max. with r = 7.10 A. corresponds to 12 atoms, it is lacking in Hendus' calcns. The atomic radius of Sb is calcd. from the tetrahedral group [Sb$_4$] = 1.4 A.; the same coördination for Sb occurs in the structure of Si$_2$Sb and GaSb, with diamond type. The difference of the structure of amorphous Sb from that of the cryst. modification is obvious.

W. Bitel

TATARINOVA, L.I.

Electronographic study of amorphous antimony. Trudy Inst.krist. no.11:104-114 '55. (Antimony) (MLRA 9:6)



APPROVED FOR RELEASE: 07/16/2001 CIA-RDP86-00513R001755110008-3"

/ An electronographic study of GaSe. L. I. Tatarinova. 3

TATARINOVA, L.I.

70-2-9/24

AUTHOR: Tatarinova, L.I.

TITLE: An electronographic investigation of amorphous antimony sulphide. (Elektronograficheskoye issledovaniye amorfnoy sernistoy surmy)

PERIODICAL: "Kristallografiya" (Crystallography), 1957, Vol.2, No.2, pp. 260 - 267 (U.S.S.R.)

ABSTRACT: Integral analysis of the radial density function obtained by transforming the X-ray or electron scattering curve of an amorphous solid has hitherto only been applied to substances with atoms of only one sort. Following the theory developed by B.K. Vaynshteyn (Kristallografia, 2 No1, 1957) materials with several kinds of atoms can now be treated. The observed intensity curve was normalised by equating the areas of $I(s).s^2$ with $\sum f_m^2(s).s^2$ where f_m is the atomic scattering factor of the mth. type of atom. Instead of using 1 electron as the unit as in X-ray scattering the scattering function of the lighter atom (S) was used. Incoherent scattering was calculated by L. Bewilogua's method (Phys. Zeit., 32, 740, 1931) and subtracted. The semi-conductor Sb_2S_3 was chosen as a suitable object. The experimentally obtained intensity curves (reproduced) wher transformed show peaks at

Card 1/2

70-2-9/24

An electronographic investigation of amorphous antimony sulphide. (Cont.)

2.33, 3.42 and about 4.0 Å. Integration of the peak areas shows that there are 5.7 S atoms round each Sb and 3.8 Sb atoms around each S. This indicates that in the amorphous phase of Sb_2S_3 the atoms tend to close packing. Acknowledgments are made to B.K. Vaynshteyn. There are 5 figures and 8 references, 6 of which are Slavic.

Card 2/2

ASSOCIATION: Institute of Crystallography Ac.Sc. USSR, (Institut Kristallografii AN SSSR)

SUBMITTED: December 12, 1956

AVAILABLE: Library of Congress

TATARINOVA, L. I.

15(0),15(2)

AUTHOR: Kolomiyets, B. T., Doctor of Technical Sciences SOV/30-59-2-45/60

TITLE: The Investigation of Vitreous Semi-Conductors (Izucheniye stekloobraznykh poluprovodnikov)

PERIODICAL: Vestnik Akademii nauk SSSR, 1959, Nr 2, pp 103-104 (USSR)

ABSTRACT: From December 1 to 2, 1958 a conference took place on this problem at the Fiziko-tekhnicheskiy institut Akademii nauk SSSR (Physicotechnical Institute of the Academy of Sciences, USSR). It dealt with the discussion of the experiments carried out, mutual information on the course of experiments and their general coordination. Representatives from 11 scientific institutions attended the conference. The following lectures were heard: V. V. Tarasov, Moskovskiy khimiko-tekhnologicheskiy institut (Moscow Chemicotechnological Institute) spoke of experimental results connected with the investigation of heat capacity at low temperatures of As_2S_3 and As_2Se_3. His second report dealt with the polymeric concept of glass formation and semiconductors in general.

R. L. Myuller, Gosudarstvennyy opticheskiy institut (State Optical Institute) emphasized the decisive role played by the covalent bond in glass formation.

A. A. Vaypolin, Institut khimii silikatov Akademii nauk SSSR (Institute of Silicate Chemistry of the AS USSR) described the investigation of the structure of the system As_2Se_3-As_2Te_3 by X-ray methods.

L. I. Tatarinova, Institut kristallografii Akademii nauk SSSR (Crystallographical Institute of the AS USSR) reported on the structural investigation of some chalcogenids by electron-diffraction.

A. I. Gubanov and V. Ya. Khartsiyev, Fiziko-tekhnicheskiy institut (Physicotechnical Institute) reported on theoretical problems of the semiconductor properties of glass types.

V. P. Shilo discussed working results in the determination of boundaries in glass formation in the As_2S_3 and As_2Se_3 systems.

N. A. Goryunova compared the boundaries of vitreous state in these systems with the criteria of glass formation obtained by Zakhariasen and Vinter-Kleyn and found that there exists no correlation between them.

S. F. Nazarova investigated the electric properties of semiconductor glass types in the TlSe - As_2Se_3 system.

B. T. Kolomiyets spoke of research work in the field of inner photoelectric effect done by T. F. Mazontova.

B. V. Pavlov discussed experimental results of the position of the absorption boundary as dependent on the change of composition of glass types.

V. P. Postnov reported on material he obtained in the investigation of the viscosity of glass types in the As_2Se_3 - As_2Te_3 system.

B. T. Kolomiyets summarized the working results obtained by the Physicotechnical Institute and found that in the materials investigated the short-range order is not changed in the transition from the vitreous into the crystalline state.

O. V. Mazurin, Leningradskiy khimiko-tekhnologicheskiy institut (Leningrad Chemicotechnical Institute) described the investigation of the semiconductor properties of silicate and borosilicate glass types with the addition of iron-cobalt and titanium oxides.

N. V. Patrovykh, Moskovskiy institut elektrotekhnicheskogo stekla (Moscow Institute of Electrotechnical Glass) outlined the investigation results of the boundaries of glass formation and the electric properties of contiguous semiconductor glass types of the composition $V_2O_5 - P_2O_5 - R_xO_y$ (R- elements of the I, II, III, IV and V groups of the periodic system).

The next conference on semi-conductor glass types will probably be held in 1959.

Card 1/4

(11

24.7000

75987
SOV/70-4-5-9/36

AUTHOR: Tatarinova, L. I.

TITLE: Study of the Short-Distance Order in Amorphous Semiconductors by Electron Diffraction Methods

PERIODICAL: Kristallografiya, 1959, Vol 4, Nr 5, pp 678-683 (USSR)

ABSTRACT: The author produced amorphous films sublimating As_2S_3 under vacuum upon a cold NaCl crystal, and GaAs, Sb_2Se_3, Ge upon celluloid films. Ge was also sublimated upon NaCl and mica. The electron diffraction photographs of the sublimated compounds provided the diffraction intensity curves, the integral analyses of which, then, produced the radial density distribution curves. This method permits one to determine the interatomic distances in short-distance order and the number of atoms around a given atom, but does not furnish data on the exact positions of the atoms in an amorphous film. The interatomic distances between unlike atoms, arranged in short-distance order, were determined according to

Card 1/5

Study of the Short-Distance Order in Amorphous Semiconductors by Electron Diffraction Methods

75987
SOV/70-4-5-9/36

$$4\pi r^2 \sum_m K_m u_m(r) - 4\pi r^2 u_0 \sum_m K_m = \frac{2r}{\pi} \int_0^\infty si(s) \sin sr\, ds. \qquad (1)$$

where r means interatomic distance, K_m - effective scattering power of an atom, $u_m(r)$ - radial density of an atom, u_0 - the average atomic density determined by

$$u_0 = \frac{d}{Mm_H}. \qquad (3)$$

d - density of the amorphous film, M - molecular weight, m_H - mass of an H atom, $s = 4\pi(\sin\vartheta)/\lambda$, i (s) - a value determined by

$$i(s) = \sum_m K_m^2 \left(\frac{I_n}{\sum_m f_m^2} - 1 \right),$$

I_n - experimental diffraction intensity, f - atomic scattering power. The ratio of the scattering powers

Card 2/5

of i and j atoms equals $(Z_i:Z_j)^{\alpha}$, where $\alpha \approx 0.75$.

The experimental interatomic distances (r A), the number (n) of like and unlike atoms surrounding a given atom, and the atomic radii are compiled in the table. The table indicates that the coordination numbers in amorphous As_2S_3 remain the same as in its crystals, and probably the short distance order remains preserved despite the amorphous state. The coordination number of 4.18 in GaS is likely to point to tetrahedral coordination as in its crystals, but the interatomic distances are slightly distorted. The amorphous Sb_2Se_3 seems to adopt a badly distorted close-packed atomic arrangement of its crystals or a transition from it to a tetrahedral coordination; the interatomic distances are reduced relative to that in the crystals. The coordination number of 4.7 in amorphous Ge is likely to point to its highly disordered state, especially if sublimated upon an amorphous sublayer. The effect of sublayers of the short-distance order is still a problem of

Study of the Short-Distance Order in Amorphous Semiconductors by Electron Diffraction Methods

75987
SOV/70-4-5-9/36

further studies. There is 1 figure; 1 table; and 13 references, 5 Soviet, 4 German, 2 U.S., 2 British. The U.S. and British references are: B. E. Warren, J. Appl. Phys., 8, 646-654, 1937; B. E. Warren and others, J. Amer. Ceram. Soc., 19, 202-211, 1936; N. W. Tideswell and others, Acta Crystallogr., 10, 2, 99-103, 1957; Structure Reports, 12, 175-176, 1949.

ASSOCIATION: Crystallographical Institute of the Academy of Sciences of the USSR (Institut kristallografii AN SSSR)

SUBMITTED: June 19, 1959

Card 4/5

Study of the Short-Distance Order in Amorphous Semiconductors by Electron Diffraction Methods

75987
SOV/10-4-5-9/36

Compound	Amorphous		Crystalline		Atomic radii A
	r, Å	n	r, Å	n	
As_4S_3	2,20	3,0 around As	2,15;	3 and 2	As: 1,40 (Coord Nr 3)
	3,62	2,0 around S	2,20; 2,34;		As: 1,35 (Coord Nr 3); As: 1,18 (Coord Nr 4); S: 1,04
GaAs	2,53	4,2	2,44	4 and 12	Ga: 1,26
	4,25	10,0	3,98		
	2,45	4,7 around Sb; 3,1 around Se	2,570--2,777	Isomorph with Sb_2S_3, Coord Nr of Sb 7	Sb: 1,36 (Coord Nr 4); Sb: 1,61 (Coord Nr 12); Se: 1,41
Sb_2Se_3	3,30		2,98		
	3,68				
	4,35				

Card 5/5

24.7000

76005
SOV/70-4-5-27/36

AUTHORS: Vaynshteyn, B. K., Tatarinova, L. I.

TITLE: Application of Strips for Integral Calculus of the Equation of a Curve of Radial Distribution

PERIODICAL: Kristallografiya, 1959, Vol 4, Nr 5, pp 782-784 (USSR)

ABSTRACT: The computation of the short-distance order in amorphous solids and liquids and a number of other structural problems necessitate the solution of the Fourier spheric integral; this can be accomplished by the method suggested by R. L. Harris, et al. The calculations can be considerably reduced if the integral expression is substituted by the sum

$$F(r) = \sum_{s_k=0}^{s_k=s_{max}} A(s_k) \frac{\sin s_k r_i}{s_k r_i} \Delta s_k,$$

Card 1/3

Application of Strips for Integral Calculus of the Equation of a Curve of Radial Distribution

76005
SOV/70-4-5-27/36

which permits the use of strips based upon a principle similar to that of Beevers-Lipson strips. Having prepared a set of 20 strips for each value of $s = 4\pi (\sin v)/\lambda$ preselected with $\Delta s = 0.2$ at the interval from 0.2 to 10, and $\Delta r = 0.2$ A at the interval from 0.2 to 9.0 A, a radial distribution curve can be computed within 3 to 4 hours, while the integral calculus requires about 1 hour to find a single point of the curve. The same strips can be used if the function F(s) is calculated on the basis of A(r). Thus, the intensity distribution curve can be computed on the basis of a trial model of the radial distribution function. The strips are also applicable for the computation of the first peak of Patterson functions and of the atomic scattering curves on the basis of the experimental or given electron density distributions. The strips have been used in a number of cases by the second author (Abstract 75987) and have furnished satisfactory results. There are three tables; and 5 references, 2 Soviet, 1 U.S., 1 U K., 1 German. The

Card 2/3

Application of Strips for Integral Calculus of the Equation of a Curve of Radial Distribution

76005
SOV/70-4-5-27/36

U.S. and U.K. references are: R. L. Harris, R. E. Wood, H. L. Ritter, J. Amer. Chem. Soc., 73, 3151-3155, 1951; C. A. Beevers, H. Lipson, Philos, Mag., 17, 855-859, 1934.

ASSOCIATION: Crystallographical Institute of the Academy of Sciences of the USSR (Institut Kristallografii AN SSSR)

SUBMITTED: June 19, 1959

Card 3/3

24.7100

77127
SOV/70-4-6-28/31

AUTHORS: Vitovskiy, B. V., Tatarinova, L. I.

TITLE: Phenomena Observed on Photoemulsion and Glass at the Contact With Quartz (Preliminary Communication)

PERIODICAL: Kristallografiya, 1959, Vol 4, Nr 6, pp 931-933 (USSR)

ABSTRACT: The authors disclosed that a latent image on a film or plate disappears if a quartz crystal or plate has rested on it for a long time before development. The spot directly under quartz becomes completely regenerated. The degree of regeneration decreases with increased distance from quartz. Experimenting further, a film was exposed to light and left for 1 year partially covered with a round quartz plate. Then a drawing was photographed by contact printing. The circular part of the film, covered with quartz, proved to have restored its sensitivity completely, i.e., the photograph within this part was as clear as if taken on fresh film, while the parts beyond the quartz cover remained blank. Another photoplate, of which half had been exposed to

Card 1/3

light and the other half not exposed, was left covered with a quartz plate that had a pencil drawing. After development of the plate, its unexposed half did not show any radiation effect, proving that no radioactive substance was present in the quartz. The exposed half became regenerated, except below the pencil lines of the drawing, which consequently left its print within the exposed half of the plate. The authors also found that after a long rest quartz leaves a print on glass or any other clean subject. The prints having the same form as the regenerated spots on exposed films are formed by thin coating whose thickness gradually vanishes from the quartz covered spot toward the edge of the glass. The coating can easily be rubbed off with the fingers. The study of the coating matter by electron diffraction methods disclosed its cubic structure with a = 5.68 A. The interplanar spacings are the same as in α-cristobalite whose tetragonal unit cells have a = 4.90 A and c = 6.92 A. However, since the coating matter is cubic, it cannot be cristobalite. SiO is cubic with a = 5.16 A, but it is known to be unstable at low temperatures. Si is cubic with

Phenomena Observed on Photoemulsion and Glass at the Contact With Quartz (Preliminary Communication)

77127
SOV/70-4-6-28/31

a = 5.42 A. Some of the electron diffraction photographs had many additional lines not yet identified. It is believed that the deposition of this coating matter causes regeneration of the exposed photofilms. A few more experiments that produced spotty coating of celluloid through circular holes furnished contradictory results. There are 5 figures.

ASSOCIATION: Crystallographical Institute of the Academy of Sciences, USSR (Institut kristallografii AN SSSR)

SUBMITTED: December 2, 1958

Card 3/3

MIL'NER, A. S., TATARINOVA, L. I.

Electric and magnetic properties of nickel films deposited on glass. Fiz. met. i metalloved. 9 no.5:673-679 My '60.
(MIRA 14:4)

1. Khar'kovskiy gosudarstvennyy universitet imeni A. M. Gor'kogo
(Nickel—Magnetic properties)
(Metallic films)

26644
S/070/61/006/005/002/011
E132/E560

24.7200 (1144, 1160)

AUTHORS: Tatarinova, L.I. and Kazmazovskaya, T.S.

TITLE: The determination of the short-range ordering in amorphous indium selenide by an electronographic method

PERIODICAL: Kristallografiya, 1961, Vol.6, No.5, pp.668-670

TEXT: Specimens of films of amorphous InSe were prepared by vacuum evaporation on to NaCl crystals (at room temperature). The electron diffraction pattern showed three diffuse rings. The intensity of the scattering curve was measured by microphotometering five photographs exposed for varying times. The scattering curve was inverted by the standard Fourier methods to give the radial density distribution. Measurements extended from $s = (\sin\theta)/\lambda = 0.6$ to 11.6. Peaks in the radial density distribution were found at radii of 2.60, 3.15 and 4.22 Å with areas of 9.07, 3.25 and 36.7, respectively. The number of closest atoms in the first coordination sphere which can be identified as the In-Se distance is measured as 3.46. The coordination is thus shown to be tetr. nedral. The second peak can be interpreted

Card 1/2

The determination of the ...

26644
S/075/61/006/005/002/011
E132/E560

as the In-In distance and its area corresponds to 0.95 (1) atom. The general number of closest neighbours is thus the sum, namely, 4.4. In the third coordination sphere corresponding to Se-Se and In-Se distances there are only two thirds as many atoms as in the crystalline InSe. The density of the amorphous InSe is 10% less than that of the crystalline material. The short-range ordering is thus as in crystalline InSe. The scattering volume over which coherent scattering takes place is estimated to be about 350 $Å^3$ and to contain about 20 atoms. The diameter of the sub-particles is about 7 Å. Acknowledgments are expressed to B. K. Vaynshteyn for discussing the obtained results. There are 2 figures and 8 references: 7 Soviet and 1 non-Soviet.

ASSOCIATION: Institut kristallografii AN SSSR
(Institute of Crystallography AS USSR)

SUBMITTED: December 29, 1960

Card 2/2

VAYNSHTEYN, B.K.; TATARINOVA, L.I.

Electron diffraction study of poly-γ- methyl L-glutamate.
Dokl. AN SSSR 139 no.6:1347-1350 Ag '61. (MIRA 14:8)

1. Institut kristallografii AN SSSR. Predstavleno akademikom N.V. Belovym.

(Electron diffraction examination)
(Glutamic acid)

TATARINOVA, L.I.; VAYNSHTEYN, B.K.

Electron diffraction study of the α-form of poly-γ-methyl-L-glutamate. Vysokom.soed. 4 no.2:261-269 F '62. (MIRA 15:4)

1. Institut kristallografii AN SSSR.
(Glutamic acid) (Electron diffraction examination)

EWP(z)/EWT(1)/EWT(m)/EPF(c)/EPR/EPA(w)-2/EEC(t)/T/EWP(t)/EWP(b)/

[illegible] with a lattice parameter [illegible] of this semiconductor compound, which

Card 1/2

L 42395-65
ACCESSION NR: AP5006464

for assuming that the arrangement of the atoms in the amorphous phase approaches maximum packing density. It is found that the short range order of the

SUBMITTED: 18Jul64 ENCL: 00 SUB CODE: SS, NP

Card 2/2

L 38512-66 EWT(m)/EWP(t)/ETI IJP(c) WDW/JD

ACC NR: AP6018766 SOURCE CODE: UR/0070/66/011/003/0389/0392

51
B

AUTHOR: Aliyev, F. I.; Tatarinova, L. I.

ORG: Institute of Physics, AN AzerbSSR (Institut fiziki AN AzerbSSR); Institute of Crystallography, AN SSSR (Institut kristallografii AN SSSR)

TITLE: Electronographic investigation of amorphous thallium selenide

SOURCE: Kristallografiya, v. 11, no. 3, 1966, 389-392

TOPIC TAGS: thallium compound, selenide, electronic measurement, CRYSTAL LATTICE

ABSTRACT: Electronograms are used to investigate the amorphous phase of thallium selenide. The films were produced by sublimation in vacuum on crystals of sodium chloride. From the curve of the radial atomic distribution there were found the Tl-Se distances $r_1 = 2.90$ Å, $n_1 \sim 2$ and $r_2 = 3.80$ Å, $n_2 \sim 7$. In the thallium selenide crystal lattice the approximate distance between the atoms of thallium and selenium is equal to 2.68 Å. The thallium atom is surrounded by four selenium atoms in a deformed tetrahedron. In amorphous thallium selenide, tetrahedrons are not formed. The method used in the investigation involves integral analysis of the curve of the experimental intensity; this is an objective method and requires no a priori

Card 1/2 UDC: 548.74

L 38512-66

ACC NR: AP6018766

assumptions as to the mutual disposition of the atoms and makes it possible to determine the distance between the atoms in the substance. The curve of the radial distribution on which the method is based is determined by the equation

$$4\pi r^2 u_m(r) \sum K_m = 4\pi r^2 u_0 \sum_m K_m + \frac{2r^2}{\pi} \int_0^\infty s^2 i(s) \frac{\sin sr}{sr} ds \ldots . \quad (1)$$

Here r is the distance between the atoms: K_m is the effective diffusivity of atom m; $u_m(r)$ is the radial density of the atoms; u_0 is the mean atomic density; $s = 4\pi \sin \vartheta / \lambda$; i(s) are quantities determined from the curve of the experimental intensivity. Orig. art. has: 1 formula, 3 figures and 1 table.

SUB CODE: 07, 20/ SUBM DATE: 24Jun65/ ORIG REF: 008/ OTH REF: 003

Card 2/2

S/120/63/000/001/032/072
E032/E314

AUTHORS: Mil'ner, A.S., Litovchenko, T.A. and Tatarinova, L.N.

TITLE: Determination of the magnetic characteristics of thin ferromagnetic films

PERIODICAL: Pribory i tekhnika eksperimenta, 8 no. 1, 1963, 131 - 132

TEXT: A torsion magnetometer is described for determination of magnetization curves and static hysteresis loops of ferromagnetic films in the temperature range 60 - 1 000 °K. The magnetometer is shown in Fig. 1. It consists of an evacuated glass or quartz tube 1. A quartz rod 4 is attached to a phosphor-bronze suspension at one end and to a copper holder 3 at the other. The film under investigation is placed in this holder, while the suspension 5 is attached to the copper rod 6 which passes through the glass-to-metal seal 7. A rigid copper frame 8 is firmly attached to the upper end of the quartz rod 4 with its plane perpendicular to the plane of the holder 3. The mirror 10 is attached to this frame and is used to observe the rotation of the system. One end of the frame is soldered onto the

Card 1/3

lower end of the suspension 5 , while the other end of the frame is soldered to a copper wire which forms a thermocouple junction with a constantan wire 14 at the holder 3 . The other end of the constantan wire is taken up through the glass-to-metal seal, forming a spiral around the suspension 5 . The necessary temperature is produced by placing the lower part of the tube in an electrical heater or a dewar. Thus, two leads are sufficient to determine the magnetization of the film by passing a compensating current through the coil 8 , the temperature being measured by the thermocouple. Fig. 3 shows the hysteresis loop for 2 650 Å thick nickel film on a glass base. The experimental points are in satisfactory agreement with the theoretical curves. There are 3 figures.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet
(Khar'kov State University)

SUBMITTED: April 7, 1962

S/120/63/000/001/032/072
E032/E314

Determination of the ....

Fig. 1:

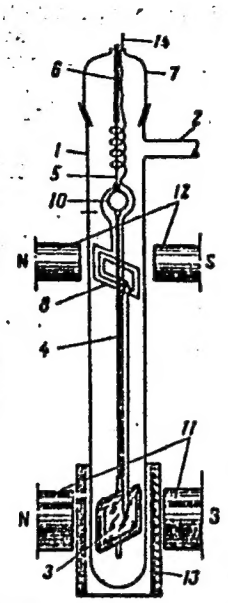
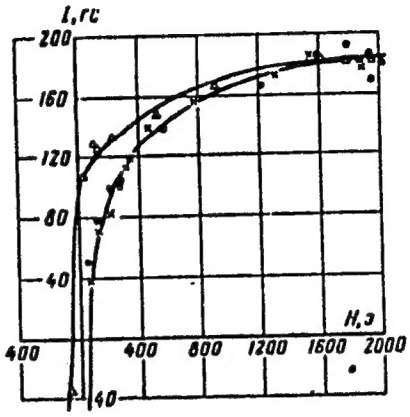


Fig. 3:



Card 3/3

39126
S/058/62/000/006/057/136
A061/A101

5,4400

AUTHORS: Vitovskiy, B., Tatarinova, L. V.

TITLE: Problem of the crystallization of "pure substances"

PERIODICAL: Referativnyy zhurnal, Fizika, no. 6, 1962, 9, abstract 6E75 (In collection: "Rost kristallov. T. 3". Moscow, AN SSSR, 1961, 247 - 253. Discuss., 501 - 502)

TEXT: Problems of diffusion and of its qualitative dependence on the surface state in the contact of two bodies are considered. The imprints produced by plane Pb-foil figures and by quartz crystals on glass surface are shown. It has been discovered that particles coating a photoemulsion surface which contains a latent image, induce a process of regression in it; thus, on photographs of negatives, the surface of which contained quartz slices and Al-foil figures, they produced clear sections on the exposed plate surface. The electron-diffraction figures from glass plates being in contact with a polished quartz surface corresponded to a substance with cubic lattice and a = 5.68 Å. In the case of Cu - glass contact, Cu_2O reflexes were detected, and a = 4.26 Å. The surface impurities

Card 1/2

S/058/62/000/006/057/136
A061/A101

Problem of the crystallization of "pure substances"

forming on the contact of two bodies may also occur in the crystallization of different substances.

I. Kamentsev

[Abstracter's note: Complete translation]

Card 2/2